

Math 1060 Chapter 1 Worksheet

1. Convert the angle 123.456° into the DMS system. Round to the nearest second.
2. Convert the angle $65^\circ 43' 21''$ into decimal degrees. Round your answer to three decimal places.
3. Convert the angle -120° from degree measure into radian measure, giving the exact value in terms of π .
4. Convert the angle $\frac{11\pi}{6}$ from radian measure into degree measure.
5. Determine supplementary and complementary angles for the angle $\frac{\pi}{3}$.
6. Graph the oriented angle 325° in standard position. Give two coterminal angles, one of which is positive and the other negative.
7. Given the area of the sector of a circle of radius r with central angle θ , measured in radians, is $A = \frac{1}{2}\theta r^2$, compute the area of a circular sector with central angle $\theta = 3^\circ$ and radius $r = 78$.
Round your answer to two decimal places.
8. An old computer hard drive contains a circular disk with diameter 2.5 inches and spins at a rate of 3,500 revolutions per minute. Find the linear speed of a point on the edge of the disk in miles per hour. Round your answer to two decimal places. (1 mile = 5,280 feet)